National Transportation Safety Board Washington, DC 20594

Printed on: 10/09/2014 09:14:52 PM

Brief of Accident

Adopted 01/30/2014

CEN13LA041

File No. 32220 11/03/2012 Roanoke,TX Aircraft Reg No. N985GE Time (Local): 10:40 CDT Make/Model: Cessna/172S Fatal Serious Minor/None Engine Make/Model: Lycoming / IO-360-L2A Crew 0 0 1 Aircraft Damage: Substantial Pass 0 0 0 Number of Engines: 1 0 Other 2 Operating Certificate(s): None Type of Flight Operation: Instructional Reg. Flight Conducted Under: Part 91: General Aviation Last Depart, Point: Graford, TX Condition of Light: Day Weather Info Src: Weather Observation Facility Destination: Same as Accident/Incident Location Airport Proximity: On Airport/Airstrip Basic Weather: Visual Conditions Airport Name: Northwest Regional Lowest Ceiling: None Runway Identification: 17 Visibility: 10.00 SM Runway Length/Width (Ft): 3500 / 40 Wind Dir/Speed: Variable / 003 kts Runway Surface: Asphalt Temperature (°C): 23 Precip/Obscuration: No Obscuration; No Precipitation Runway Surface Condition: Dry Pilot-in-Command Age: 43 Flight Time (Hours) Certificate(s)/Rating(s) Total All Aircraft: 45 Student Last 90 Days: 20 Total Make/Model: 45 Total Instrument Time: 1 Instrument Ratings None

*** Note: NTSB investigators may not have traveled in support of this investigation and used data provided by various sources to prepare this aircraft accident report. ***

The student pilot was returning from a solo cross-country flight at the time of the accident. He stated that the approach for landing was normal until he was on short final approach, when the airplane's landing gear struck an automobile that was being driven on a road that crossed near the approach end of the runway. The airplane subsequently landed hard and the nose and left main landing gear collapsed. The airplane veered off the right side of the runway before coming to rest in the grass. The student pilot stated that there were no malfunctions or failures with the airplane before it impacted the vehicle. The automobile driver reported that he had been to the airport before and was aware of the proximity of the road to the runway, describing the layout as "precarious." He noted that he did not see or hear the approaching airplane traffic before the accident. He said he was about halfway across the road, immediately north of the runway, when he first heard the airplane engine; the airplane impacted his car immediately afterward.

The displaced threshold for the landing runway was located about 140 feet from the approach end of the runway. The roadway that crossed the extended runway centerline was located about 25 feet from the approach end of the runway pavement, about 165 feet from the displaced threshold. Data indicated that the runway threshold was previously displaced 400 feet.

Brief of Accident (Continued)

CEN13LA041 File No. 32220

11/03/2012 Roanoke ,TX

Aircraft Reg No. N985GE

Time (Local): 10:40 CDT

Although the privately-owned airport was not required to maintain airport design standards established by the Federal Aviation Administration, the proximity of the roadway and the reduced runway threshold displacement did not provide any safety margin for approaching aircraft.

Updated at Jan 30 2014 12:33PM

CEN13LA041 File No. 32220

11/03/2012

Roanoke,TX

Aircraft Reg No. N985GE

Time (Local): 10:40 CDT

OCCURRENCES

Approach-VFR pattern final - Miscellaneous/other Approach-VFR pattern final - Collision with terr/obj (non-CFIT) Approach-VFR pattern final - Loss of control in flight

FINDINGS

Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Descent/approach/glide path-Not attained/maintained - C Personnel issues-Action/decision-Action-Incorrect action performance-Student pilot - C Environmental issues-Physical environment-Object/animal/substance-Ground vehicle-Effect on operation - F Environmental issues-Operating environment-Airport facilities/design-(general)-Effect on operation - F

Findings Legend: (C) = Cause, (F) = Factor

The National Transportation Safety Board determines the probable cause(s) of this accident as follows:

The student pilot's failure to maintain clearance from obstacles on the runway approach path. Contributing to the accident was the airport management's decision to relocate the runway displaced threshold, which did not provide an adequate safety margin for approaching aircraft, and the automobile driver's inadequate lookout for approaching aircraft before crossing the runway's approach path.